

Title (en)  
SLUDGE TREATMENT DEVICE

Title (de)  
SCHLAMMBEHANDLUNGSVORRICHTUNG

Title (fr)  
DISPOSITIF DE TRAITEMENT DE BOUES

Publication  
**EP 3673968 A4 20210310 (EN)**

Application  
**EP 17922196 A 20170823**

Priority  
JP 2017030064 W 20170823

Abstract (en)  
[origin: EP3673968A1] A traveling direction of a sludge drawing tool can be reversed regardless of the position of the sludge drawing tool. An endless chain 5 is wound around a pair of wheels 4a and 4b, has straight lines L1 and L2 extending therebetween, and a pulling portion 5a is provided in a part thereof. A sludge drawing tool 2 is arranged to be able to move forward between the wheels 4a and 4b. The sludge drawing tool 2 is provided with engagement portions 7a to 7d having a shape enabling the pulling portion 5a circumferentially moving along the chain 5 to be engaged therewith and disengaged therefrom. When the driving wheel 4a rotates in a forward direction, the engagement portion 7a comes into contact with the pulling portion 5a circumferentially moving along the straight line L1 in a drawing direction, to make the sludge drawing tool 2 move in the drawing direction. During the rotation in the forward direction, the engagement portion 7b comes into contact with the pulling portion 5a circumferentially moving along the straight line L2 in a returning direction, to make the sludge drawing tool 2 move in the returning direction. When the driving wheel 4a rotates in a reverse direction, the engagement portion 7c comes into contact with the pulling portion 5a circumferentially moving along the straight line L1 in the returning direction, to make the sludge drawing tool 2 move in the returning direction. During the rotation in the reverse direction, the engagement portion 7d comes into contact with the pulling portion 5a circumferentially moving along the straight line L2 in the drawing direction, to make the sludge drawing tool 2 move in the drawing direction.

IPC 8 full level  
**B01D 21/18** (2006.01); **B01D 21/20** (2006.01); **B65G 23/00** (2006.01); **F16H 55/00** (2006.01)

CPC (source: EP US)  
**B01D 21/18** (2013.01 - EP US); **B01D 21/20** (2013.01 - EP US); **B01D 21/245** (2013.01 - US)

Citation (search report)

- [I] US 5478471 A 19951226 - FUJIWARA MICHIIHIRO [JP]
- [A] DE 102004055981 A1 20060524 - FUJIWARA SANGYO K K [JP]
- [A] DE 2211922 A1 19730920 - RUHRKOHLE AG
- See also references of WO 2019038842A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3673968 A1 20200701**; **EP 3673968 A4 20210310**; **EP 3673968 B1 20230510**; CA 3072147 A1 20190228; ES 2956944 T3 20240105; JP 6814297 B2 20210113; JP WO2019038842 A1 20200727; US 10905974 B2 20210202; US 2020246725 A1 20200806; WO 2019038842 A1 20190228

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